



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/528,780	03/17/2000	Joerg Plamper	HBC-221-KFM	5327

7590 01/07/2004

Karl F Milde Jr.
Milde Hoffberg & Macklin LLP
Suite 460
10 Bank Street
White Plains, NY 10606

EXAMINER

RODRIGUEZ, ARMANDO

ART UNIT	PAPER NUMBER
----------	--------------

2828

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/528,780	PLAMPER ET AL.	
	Examiner	Art Unit	
	Armando Rodriguez	2828	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

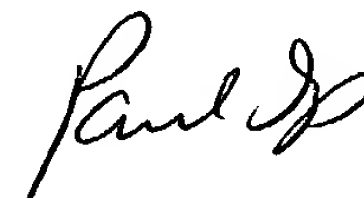
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5 and 11 is/are rejected.
- 7) ☐ Claim(s) 3,6-10 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.



PAUL IP
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments filed August 25, 2003 regarding claims 1,2,4,5 and 11 have been fully considered but they are not persuasive.

Applicant's arguments on page 4 regarding claim 1, discusses a preparatory procedure performed once to determine the relation between the forward voltage and the forward current, however claim 1 does not recite or imply such a limitation. Girmay does disclose monitoring the output power, regardless if the step is repeated, and drives the laser in accordance to the relationship of the voltage and current, as described in column 2 lines 5-25.

Applicant's arguments on page 7 regarding claim 2, the claim recites "electrical means" and not "electrical mechanisms" as argued by applicant. Electrical means will not exclude the use of an optical detector, since such an element will generate an electrical signal.

Applicant's arguments on page 7-8 regarding claim 4, applicant's attention is directed to figure 3, where selection of any one of the illustrated temperatures and plotting the points between the voltage and the current will portray a straight line.

Applicant's arguments on page 9 regarding claim 5, figure 4 illustrates a constant forward voltage, figure 2 illustrates an increasing forward current and in column 2 line 15 Girmay discloses the power set at a predetermined level, thereby selecting any of the output power of figure 2 and using the combination of figures 2-4 the points between the forward voltage and forward current of figure 3 will portray a straight line.

Art Unit: 2828

Applicant's arguments on page 12 regarding claim 11 are considered an admission of obviousness, since applicant agrees that the relations of figures 2 or 4 would suggest the claimed relationship. Therefore, the person having ordinary skill in the art to will deduce the relationship of claim 11, as portrayed in figures 2-4.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,2,4,5,11 are rejected under 35 U.S.C. 102(b) as being anticipated by Girmay (PN 5,414,280).

Regarding claim 1,

The method steps are anticipated by the combination of figures 2-4, where a measurement of the output power of the laser is determined based on the combination of the forward voltage and forward current as illustrated in figure 3 and described in the abstract. In column 2 lines 5-25 does disclose monitoring the output power and drives the laser in accordance to the relationship of the voltage and current.

Regarding claim 2,

The circuit illustrated in figure 5 anticipates the method steps, where the electrical implementation of the forward voltage and the forward current of figure 3 based on different temperatures is achieved.

Regarding claim 4,

Figure 4 illustrates a linear behavior of the forward voltage obtained by combination between the forward voltage and the forward current of figure 3.

Regarding claim 5,

In column 2 lines 4-15, Girmay suggest that a voltage driver could be used to drive the laser based on the combination of the forward voltage and forward current combination of figure 4. Figure 4 illustrates a constant forward voltage, figure 2 illustrates an increasing forward current and in column 2 line 15, Girmay discloses the power set at a predetermined level.

Regarding claim 11,

Figure 4 illustrates at different temperatures the forward voltage of the laser by the combination of the forward voltage and the forward current of figure 3. It also illustrates the forward voltage necessary at different optical power outputs and temperature, where the power output can be set to a particular output based on the forward voltage as described in the abstract and column 2.

Allowable Subject Matter

Claims 3,6-10 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

None of the cited prior arts alone or in combination discloses the claimed method steps for stabilizing the optical output power of a laser, as recited in dependent claims 3 and 11.

Regarding claims 3,8-10,

None of the recited prior arts alone or combination discloses the method steps of dependent claim 3 along with the limitations of all intervening claims and base claim, in particular where the forward voltage is measured via an analog/digital interface using a suitable data processing device, and wherein the forward current is controlled via a digital/analog interface such that the previously determined functional correlation is established between the set forward current and the measured forward voltage.

Regarding claims 6,

None of the recited prior arts alone or combination discloses the method steps of claim 6 having the combination of a linearly decreasing forward voltage, a constant light power and an increasing forward current, where the diode is connected in series with a resistor and a constant voltage source provide a linear function for determining the forward voltage.

Regarding claim 7,

None of the recited prior arts alone or combination discloses the method steps of claim 6 having the combination of a linearly increasing forward voltage, a constant light power and an increasing forward current, where the diode is connected in series with a resistor of negative resistance and a constant voltage source provide a linear function for determining the forward voltage.

Regarding claim 12,

None of the recited prior art alone or in combination discloses the method steps of dependent claim 12 along with all intervening claims and base claim, in particular tracing the time progression of the light power during a power-up procedure and setting the parameters such that the light power remains constant in spite of the increasing temperature of the diode after power-up.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Armando Rodriguez whose telephone number is (703) 308-6218. The examiner can normally be reached on 10-hour day / M-F.

Application/Control Number: 09/528,780


Page 7

Art Unit: 2828

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (703) 308-3098. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-4881.


Armando Rodriguez
Examiner
Art Unit 2828


Paul Ip
Supervisor
Art Unit 2828

AR/PI